# **Product Overview:**

The COVVI Hand combines an extraordinary level of functionality with a captivating design to offer you the best prosthetic hand on the market. The hand is enabled by an innovative actuator design with market-leading power density and comes available in three different sizes. Our hand size range is suitable for all adults and most adolescents and comes in small, medium and large. The height of our three different hand sizes are:

- Small: 6 ¾ inches / 17.15cm
- Medium: 7 ¼ inches / 18.42cm
- Large: 7 ¾ inches / 19.69cm

When we started our design process, we started with the small COVVI Hand and implemented the advanced technology we wanted to feature before building bigger; this ensured that no compromises were made on any functionality across the size range. The hand was designed based on measured data collated from human hands, which enabled the hand to be far more anatomically proportionate whilst sporting improved aesthetics. The natural form factor of our device is complimented by top-of-the-range, premium materials to create the ultimate combination of form, style and function.

COVVI's aim is to deliver a world-leading prosthetic hand with users and clinicians at its heart, working together we can action real positive change to the many lives of upper-body prosthetic users forever.

### **Features and Benefits:**

- New L-Code L6895: The COVVI Glove The COVVI Hand has an integrated medical-grade silicone glove with a soft-touch coating. This provides the hand with IP44 rated dust and water resistance. The index finger is also coated to allow the user to use touch screens, which many other prosthetic hands are still not compatible with, and in some cases require a wand to even type on a normal keyboard. At every stage of design, we've thought about how prosthetics need to respond to modern day life, so we ensured that the COVVI Hand was not only compatible with these new technologies, but could actually be used to operate them at an acceptable level.
- **Customise Your Functions** There are several different triggers available in the hand which the user can assign to functions such as, changing grip, grip tables. Each of the four grip tables can be configured by the end user to hold up to 6 preprogramed grips of their choice.
- Solutions That Fit Your Style The COVVI Hand comes in three sizes with an option of three striking matt coloured covers; Carbon Black, White and Titan Grey.
- **Grip Patterns** The hand comes pre-programmed with 14 default grip patterns that can be configured in tables by the end-user and easily switched between to complete various tasks. This range can also be expanded with an additional six, user specified grips if required (downloadable via the COVVI Go App)
- **COVVI Go App** Available on both Apple and Android devices, COVVI Go is the control centre for the COVVI Hand. By connecting to the hand via Bluetooth, the user can manage input settings, grip switch triggers and measure inputs whilst allowing for troubleshooting in the event of any potential faults.
- **Robust Versatility** In addition to the tough exterior materials (Silicone and High-Strength Polymers) used to protect the internal components, the strength and speed capabilities of the COVVI Hand are on par with market leaders.
- Ease Of Use The COVVI Hand has been developed so that prosthetics users no longer need to compromise between dexterity and grip strength.
- Modern Conveniences The index finger is touchscreen compatible.

- **Passively Flexing Fingers and Thumb** The hand is loaded with switching options to give users fast access to a multitude of grips. Our digits are spring-loaded to provide impact protection and reduce the likelihood of damage, as well as being manufactured from stainless steel and aluminium for increased strength and durability.
- Integrated Flex Wrist With a range of +/- 30° and a simple push/push lock, our wrist operates using
  passive spring-loaded technology for natural and fluid usage, as well as helping to reduce strain on
  the user's shoulder.
- Water & Dust Resistant The COVVI Glove is made from medical-grade silicone with a soft-touch coating and boasts thicker integrated fingertip pads, which improves the life of the glove. Our IP44 rating ensures that the hand is protected against foreign objects larger than 1mm, as well as liquids to make it 'splash proof'.
- Innovative Technical Support COVVI is the one the first companies in the industry to offer remote firmware updates, which can provide new features and bug fixes directly to the user's hand without the need to go to a clinician
- COVVI Remote Assist COVVI's modern Remote Assist feature allows our experienced team to
  provide real-time support to users and implement any software changes in real-time. This seamless
  and intuitive functionality is housed within the COVVI Go App and eliminates the need for users to
  go into the clinic for minor issues and updates; ultimately ensuring that clinicians have more time to
  provide comprehensive support to your patients.
- **E-Paper Screen** The integrated E-Paper screen allows the user to display important information, such as the current grip pattern, battery monitor and system notifications. There is also vital diagnosis data for the clinician too very useful for mode identification, troubleshooting issues, training information during set-up and fault diagnosis.
- Patented, Intuitive Thumb Control Our powered thumb flexion and rotation has intuitive switching to automatically position the thumb based on the selected grip. The motors are designed to drive simultaneously to provide the end user with access to opposed and unopposed grips. Using a twin motor design, effective thumb control is achieved in just 0.3 seconds for both full rotation and full-flex travel. COVVI's thumb design has a passive flex capability (which also applies to all fingers) where we have implemented an intuitive thumb tap trigger and rocker switch each can be set to perform one of fourteen trigger functions.
- Thumb Operational Modes -

**Latched:** Prevalent in prosthetics already, using opposed and unopposed grips - this allows easier access to multiple grips.

**Dynamic:** Simultaneous thumb flex and rotation, at fully open the thumb is parked in a central position.

• **Power Supply** - Our product features an extremely light and highly flexible battery solution that will follow the contours of the limb without bending the cell. Charged via a waterproof USB-C socket, which is great for charging on the go, and is compatible with all 7.4v EQD hand systems. Our arm connectors are military-grade and utilize simple latching features. The power supply is compact and robust with a rubberized design that communicates with the built-in E-Paper screen, displaying battery life among other information.

# **Technical Information:**

- Voltage 7V to 8.4V DC
- Maximum Current Consumption 5A (Max. Constant) / 7A (Max. peak, 50ms duration)
- Battery Capacity 1600mAh or 2600mAh
- Maximum Hand Load Limit (Upwards Force) 90kg / 198 lbs across knuckle
- Maximum Hand Load Limit (Downwards Force) 32kg / 71 lbs across the fingers

- Maximum Finger Load Limit 16kg / 35 lbs
- Full Open to Full Close 0.7 seconds to achieve grip
- Tripod Grip 0.3 seconds to achieve grip
- Tripod Grip Force 45N / 10 lbf
- Power Grip Force 80N / 18 lbf
- Key Grip Force 22N / 5 lbf

#### L-Codes: Including COVVI's new Glove L-Code L6895

- **L6880** Electric hand, switch or myoelectric controlled, independently articulating digits, any grasp pattern or combination of grasp patterns, includes motor(s)
- L6895 Addition to upper extremity prosthesis, glove for terminal device, any material, custom
- L6621 Upper extremity prosthesis addition, flexion/extension wrist with or without friction, for use with external powered terminal device
- L6881 Automatic Grasp Feature, addition to upper limb electric prosthetic terminal device
- L6882 Microprocessor control feature, addition to upper limb prosthetic terminal device
- L6629 Upper extremity addition, quick disconnect lamination collar with coupling piece, otto bock or equal

#### **Specifications:**

- Hazmat No
- Typically in Stock No
- Age Group Adults and Adolescents
- Rewards No
- Supplier URL <u>www.covvi.com</u>